

[54] **PROCESS FOR PRODUCING CONTACT LENSES**

[75] Inventor: **Malcolm G. Townsley**, Park Ridge, Ill.

[73] Assignee: **Wesley-Jessen Inc.**, Chicago, Ill.

[22] Filed: **Feb. 27, 1974**

[21] Appl. No.: **446,399**

Related U.S. Application Data

[63] Continuation of Ser. No. 232,040, March 6, 1972, abandoned, which is a continuation of Ser. No. 3,945, Jan. 19, 1970, abandoned.

[52] **U.S. Cl.** 351/40; 351/160; 351/177

[51] **Int. Cl.²** **G02C 7/04**

[58] **Field of Search** 351/160, 40, 177

[56] **References Cited**

UNITED STATES PATENTS

2,809,556	10/1957	Hornstein	351/160
3,227,507	1/1966	Feinbloom	351/160

OTHER PUBLICATIONS

Goldberg, Article in *Optometric Weekly*, Vol. 60, No. 7, Feb. 13, 1969, pp. 31-38.

Jessop, Article in *Contacto*, Vol. 5, No. 10, Oct. 1961, pp. 325, 326, 329, 330 & 332.

Jessop, Article in *Contacto*, Vol. 9, No. 1, March 1965, pp. 10-13.

Bier, Article in *Journal of the American Optometric Assoc.*, Vol. 28, No. 7, Feb. 1967, pp. 394-396.

Reynolds, Article in *Contacto*, Vol. 3, No. 3, March 1959, pp. 53-59.

Isen, Article in *Optometric Weekly*, Vol. 50, No. 52, Dec. 31, 1959, pp. 2581 & 2582.

Hamilton, Article in *Contacto*, June 1965, pp. 33 & 34 cited.

Mandell, Article in *Am. J. of Optometry & Archives*, Dec. 1965, pp. 742-747.

Townsley, Article in *Contacto*, Dec. 1967, pp. 72-81.

Primary Examiner—David H. Rubin

Attorney, Agent, or Firm—Pennie & Edmonds

[57]

ABSTRACT

A process for prescribing and manufacturing contact lenses wherein a first concave curvature is developed on the interior face of the lens in the central optical zone. This concave curvature conforms to a portion of a sphere having a radius equal to the radius of a base curve determined to be suitable for the particular patient. A second concave curvature is developed on the interior face of the lens to provide a bearing zone in surrounding relationship relative to the optical zone. The second curvature conforms to an annulus of a sphere having a radius determined by the slope of the patient's eye at points of contact of the second curvature with the eye. The slope is determined by calculating the eccentricity of the ellipsoidal surface which most closely describes the shape of the patient's eye.

3 Claims, 2 Drawing Figures

